Name:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Period:\_\_\_\_\_\_\_\_

**Study Guide Pedigrees, Meiosis, Nondisjunction Quiz Monday March 9**

**Vocabulary**

Autosomal recessive

Autosomal dominant

X-linked recessive

Mitosis

Meiosis

Diploid

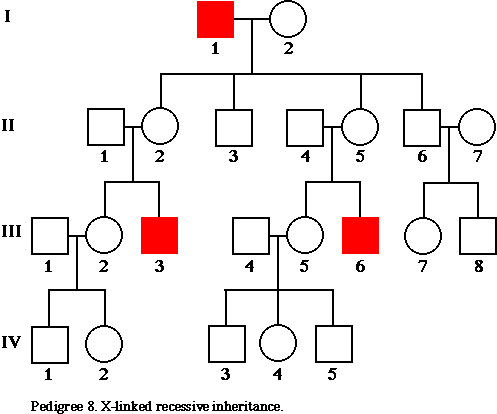
Haploid

Gametes

Homologous chromosomes

Sister chromatids

**Pedigrees**

*If given a pedigree be able to determine the pattern of inheritance.*

Name two autosomal recessive disorders. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Name two autosomal dominant disorders. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Name two X-linked recessive disorders. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Meiosis**

What types of cells are produced by meiosis? (Are they diploid or haploid?) \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

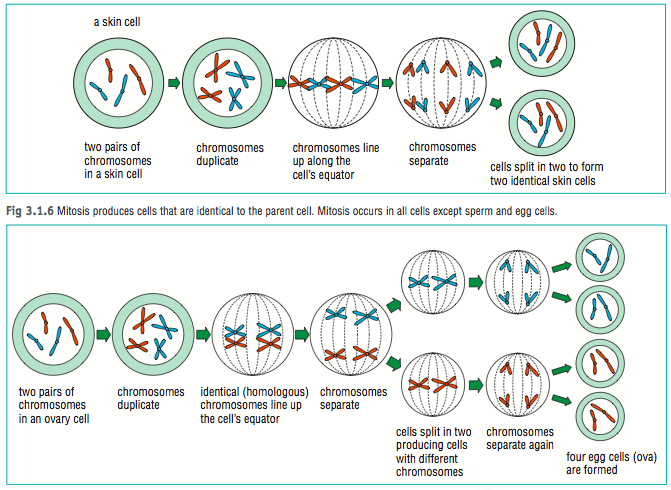
How many divisions occur during meiosis? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

What event occurs which creates unique chromosomes? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Put the following events in order:

|  |  |
| --- | --- |
| Order (number) | Event |
|  | 1. Sister chromatids separate |
|  | 1. Homologous chromosomes line up in pairs |
|  | 1. Crossing over of homologous chromosomes |
|  | 1. Four, unique haploid gametes created |
|  | 1. Homologous chromosomes separate |

Why are siblings not identical to one another?

**Mitosis vs Meiosis**

Before mitosis and meiosis, the parent cell is in interphase. During interphases, specifically the S phase, what happens?

|  |  |  |
| --- | --- | --- |
|  | Meiosis | Mitosis |
| Types of cells created? (also are the cells haploid or diploid?) |  |  |
| Number of cell divisions? |  |  |
| Do homologous chromes line up together? |  |  |
| Is there crossing over of homologous chromosomes? |  |  |
| Do sister chromatids separate? |  |  |

**Nondisjunction**

What is nondisjunction?

What is Down Syndrome? What causes Down Syndrome? What are the symptoms?

What is Turner Syndrome? What are symptoms?

What is Klinefelter Syndrome? What are symptoms?